

## **5 Stage 1 Standard Operating Procedure**

### **5.1 Purpose**

The objective of Stage 1 (Planning and Environmental Process) is to provide detailed planning and environmental analysis to produce the project scope, location, and major design features; a project cost estimate of engineering, right-of-way, utility relocations, construction, mitigation, construction administration and a reasonable contingency, resulting in the overall project budget in current dollars; and documentation of the environmental decision. The completion of Stage 1 will result in documentation to move a proposed project into Stage 2 (Funding and Project Prioritization).

### **5.2 Process**

All projects, regardless of classification (preservation, operations, safety, capacity or other) and funding source, will be developed and carried through Stage 1 to accomplish the above purpose, using a combination of the appropriate level of preliminary engineering; social, economic and environmental study; and coordination with all regulatory and affected agencies and local governing authorities. For larger projects, this process will be accomplished using a project team, comprised of an overall project manager from the Project Management Unit or dual project managers from the Environmental Section and the appropriate design section (appointed by the Chief Engineer) and a group of staff made up of the necessary disciplines (geometrics, road design, bridge design hydraulics, traffic engineering, real estate, utilities, environmental specialists, planners, etc.) required to evaluate the project in its entirety. Under certain conditions, consultants may serve as project team members. (Refer to Appendix IV for more information on team building.)

Projects that are federally funded, or otherwise require a federal action in order to be implemented, will follow a process in accordance with the National Environmental Policy Act (NEPA). Projects developed in accordance with NEPA will provide one of the following types of environmental decision documentation:

- Categorical Exclusion (CE)
- Environmental Assessment/Finding of No Significant Impact (EA/FONSI)
- Environmental Impact Statement/Record of Decision (EIS/ROD)

Projects that may not initially be considered for Federal funding and do not require a Federal action or permits will be developed following a process closely adhering to the NEPA process. As a result, such projects may be eligible for future Federal funding at subsequent stages of project development, thereby maximizing funding options and minimizing delay. Actions normally taken by the lead Federal agency under NEPA will be the responsibility of the Environmental Engineer. Environmental documentation will be one of the following types:

- Environmental Exclusion (EE)
- Environmental Assessment/Environmental Finding (EA/EF)
- Environmental Impact Statement/Environmental Record (EIS/ER)

This Stage 1 standard operating procedure and the *Stage 1 – Planning/Environmental Manual of Standard Practice* will be used to guide the development of Stage 1 documentation.

To initiate Stage 1, a project must have been found feasible in Stage 0 (Feasibility), and the following deliverables (as applicable) provided:

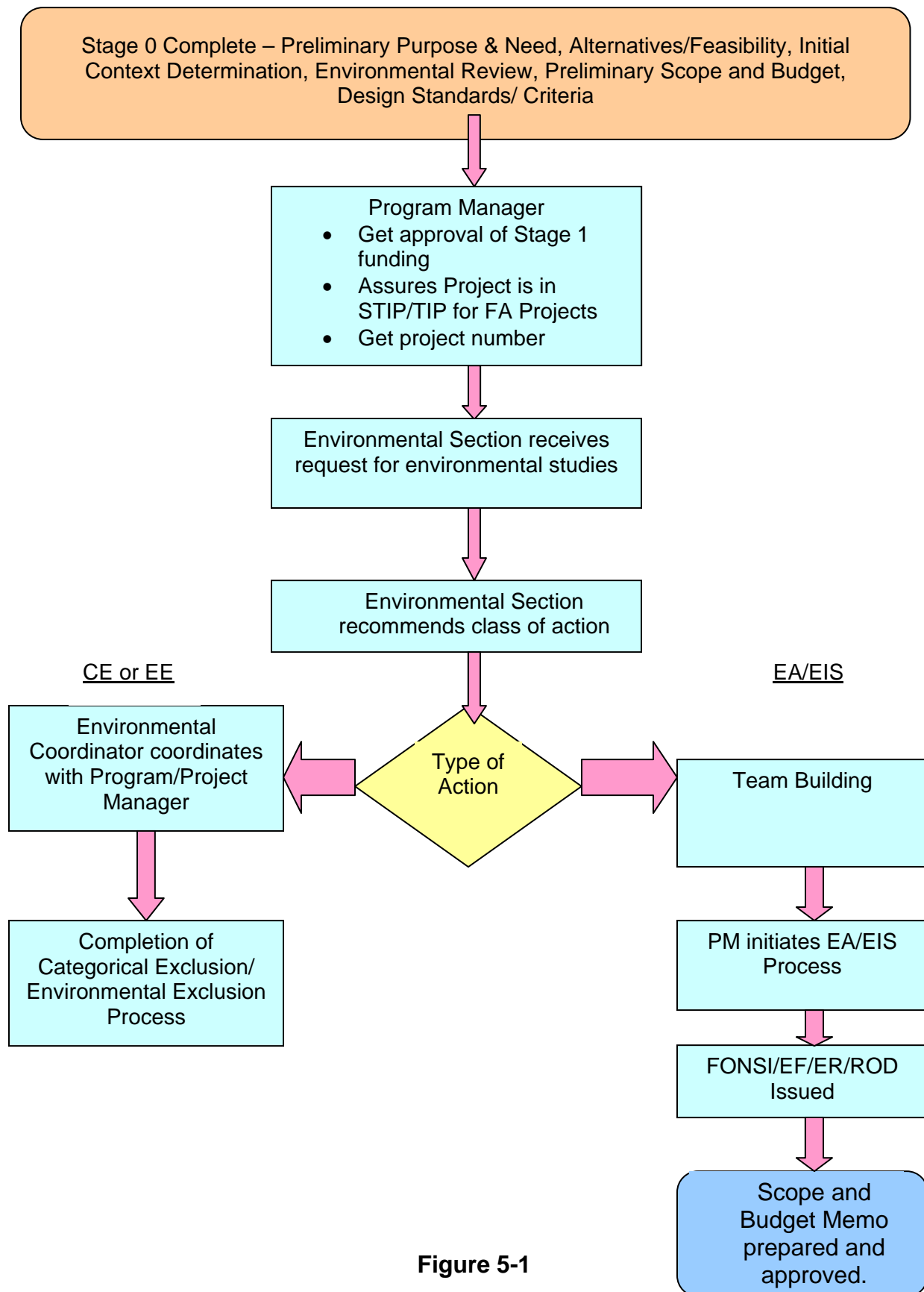
- Preliminary Purpose and Need Statement – a preliminary description of the transportation problem or other needs that the proposed project is intended to address.
- Preliminary Alternatives and Feasibility Analysis – provides conceptual alternatives (including the “no build”) considered technically feasible.
- Value Planning/Value Engineering – identifying potential construction issues and recommended solutions.
- Preliminary Constructability Review – identifying potential construction issues and recommended solutions.
- Preliminary Environmental Review and Budget – identifies potential environmental impacts and issues, especially issues which are likely to stop implementation of the project; also creates a preliminary budget indicating the cost of implementing the project.
- Design Standards and Exceptions – identifies AASHTO and DOTD standards for construction of the project, including any exceptions required and why exceptions are needed.
- Future ITS and traffic operations considerations (if any).

At the beginning of Stage 1, the type of environmental action required for the project will be determined.

- Based on the Stage 0 determination of project feasibility and a contemplated action of a CE or EE nature, the assigned project manager or program manager prepares the estimated cost for Stage 1 processing and the authorizations required to initiate the Stage 1 process. The project manager and the Environmental Section staff will produce deliverables using the CE checklists as the process guide (see pages 5-7 through 5-12 for checklists).
- Based on the Stage 0 determination of project feasibility contemplating an EA/FONSI/EF or EIS/ROD/ER, dual project managers will be appointed by the Chief Engineer. A project team will be formed by the project managers as outlined in the sections on “team building.” The co-project managers will prepare an estimate of funding and authorizations required to complete the Stage 1 process. This request for funding will be coordinated with the Project Delivery Steering Committee. The Stage 1 EA and EIS processes to be followed are included as checklists in this chapter (see pages 5-12 through 5-14 for checklists).

For the Stage 1 process to be completed, the project must be approved under one of the previously mentioned environmental processes and, for an EA/FONSI/EF and EIS/ROD/ER, a Scope and Budget Memorandum must be prepared. See section 5.6 (Deliverables) on page 5-15 for the format and information necessary for the Scope and Budget Memorandum. The Scope and Budget Memorandum will be approved and signed by the Chief Engineer.

Figure 5-1 on the following page provides a flowchart that illustrates the basic steps of the Stage 1 Process.



**Figure 5-1**

### 5.3 Responsibility Matrix

TASK	PLANNING/ SCOPING	ENVIRONMENT	DESIGN	TRAFFIC ENGR.	REAL ESTATE UTILITIES	DISTRICT
1. Preliminary Project Tasks						
a. Prepare NOI (EIS)		Responsible For				
b. Define Study Area	Provide Assistance	Responsible For	Review and Comment			Review and Comment
c. Develop Public Involvement Plan	Provide Assistance	Responsible For				Provide Assistance
d. Prepare SOV		Responsible For	Review and Comment	Provide Assistance		
e. Identify Stakeholders	Provide Assistance	Responsible For	Provide Assistance			Provide Assistance
f. Scoping Meetings	Provide Assistance	Responsible For	Provide Assistance	Provide Assistance	Provide Assistance	Provide Assistance
2. Purpose and Need						
a. Preliminary P&N	Responsible For	Provide Assistance	Review and Comment	Provide Assistance		Review and Comment
b. Preliminary Environmental Issues	Provide Assistance	Responsible For				Provide Assistance
c. Final P&N	Review and Comment	Responsible For	Review and Comment	Provide Assistance		Review and Comment
3. Alternatives Study						
a. Environmental Screening	Provide Assistance	Responsible For	Provide Assistance			
b. Project Constraint Mapping	Provide Assistance	Responsible For	Provide Assistance			
c. Environmental Inventory	Provide Assistance	Responsible For	Provide Assistance			
d. Preliminary Alternatives	Provide Assistance	Review and Comment	Responsible For	Provide Assistance	Review and Comment	Review and Comment
e. Alternatives Analysis/Screening	Provide Assistance	Responsible For	Review and Comment	Review and Comment	Review and Comment	

<b>TASK</b>	<b>PLANNING/ SCOPING</b>	<b>ENVIRONMENT</b>	<b>DESIGN</b>	<b>TRAFFIC ENGR.</b>	<b>REAL ESTATE UTILITIES</b>	<b>DISTRICT</b>
f. Public/Agency Involvement	Provide Assistance	Responsible For	Provide Assistance			Provide Assistance
g. Refine Alternatives	Review and Comment	Review and Comment	Responsible For	Provide Assistance	Review and Comment	Review and Comment
h. Preferred Alternative	Review and Comment	Responsible For	Review and Comment		Review and Comment	Review and Comment
4. Environmental Documentation						
a. Draft Document	Review and Comment	Responsible For	Review and Comment	Provide Assistance	Provide Assistance	Provide Assistance
b. Distribute Draft Document	Provide Assistance	Responsible For				
c. Public Hearing	Provide Assistance	Responsible For	Provide Assistance		Provide Assistance	Provide Assistance
d. Technical Reports	Review and Comment	Responsible For				
e. Address Comments	Provide Assistance	Responsible For	Provide Assistance	Provide Assistance	Provide Assistance	Provide Assistance
f. Selected Alternative	Review and Comment	Responsible For	Review and Comment			Review and Comment
g. Prepare Final Documents	Review and Comment	Responsible For	Review and Comment	Provide Assistance	Provide Assistance	Provide Assistance
h. Coordinate Project Budget with Banker	Review and Comment	Responsible For	Review and Comment			Review and Comment
i. Environmental Closure		Responsible For				
j. Scope and Budget Memorandum		Responsible For	Responsible For			

## **5.4 Checklists**

### **5.4.1 Categorical Exclusions Checklist**

Categorical Exclusions are minor environmental determinations concluding that projects will have no significant environmental impacts. These determinations are based on types of projects which have been shown historically to have little or no effect on the environment and would not otherwise be a candidate for an Environmental Assessment or Environmental Impact Statement.

The types of projects eligible for environmental processing as Programmatic Categorical Exclusions are listed in the Consolidated Letter Agreement between the DOTD and Federal Highway Administration (FHWA) dated March 2, 1995, as amended by Consolidated Letter Agreement dated August 30, 1995, and the FHWA letter concerning changes to processing when properties on or eligible for the National Register of Historic places are involved, dated February 29, 2000. The types of projects which may be processed as Programmatic Categorical Exclusions and the information required in making this determination are as follows:

- Actions not leading or involving construction, such as planning and technical studies, grants, research, approvals of plans and programs – A written description of such studies should be sufficient to process these actions programmatically in Stage 1.
- Approval of utility installations along or across highway – A site diagram for the location of a utility across the highway right-of-way must be provided.
- Construction of bicycle and pedestrian paths, related facilities – The specific location, scope and physical description (path routing and typical section) of these facilities must be provided.
- Highway Safety Planning activities – A description of the planning activity needs to be provided. If this is a highway safety project being funded by FHWA, then the specific location of the project and associated safety improvements must be provided for documentation.
- Transfer of Federal lands when not an FHWA action – A description of the land to be transferred and purpose of transfer needs to be provided.
- Installation of sound barriers or soundproofing of publicly-owned buildings – The location and physical description (height, length and construction material) of the installation of the sound barriers or soundproofing must be provided.
- Landscaping – The location and physical description (physical limits, types of plantings, and maintenance requirements) of the landscaping must be provided.

- Installation of fencing, signs, pavement markings, passenger kiosks, traffic signals and railroad warning devices with no substantial land acquisition or traffic disruption – The location and full description (including drawings) of these items must be provided.
- Emergency repairs – The location and full description (type of repair, physical limits and emergency purpose) of the emergency repairs must be provided.
- Acquisition of scenic easements – The location (physical limits) and need (view shed) for the acquisition must be provided.
- Determination of payback for property previously acquired with FA participation – The location of property (physical and legal description), amount of payback, and reason for payback must be provided.
- Improvements to rest areas and weigh stations – The location and nature of the improvements (buildings, grounds, and systems) must be provided.
- Ridesharing activities – Information relative to the ridesharing activity must be provided.
- Alterations to facilities and vehicles for handicapped/elderly accessibility – The location and description of the facilities and/or vehicles (type of accessibility provided and compliance with ADA) to be altered must be provided.
- Track and rail bed maintenance and improvements inside existing right-of-way – The location and description (type of maintenance and physical limits) of the improvements must be provided.
- Promulgation of rules, regulations and directives – A copy of the rules, regulations or directives must be provided.
- Resurfacing, rehabilitation, or restoration of existing highway (no additional lanes) – The location, physical limits and scope of the rehabilitation or restoration (typical section, construction and right-of-way limits) of the highway must be provided.
- Minor widening/adding shoulders (no additional lanes) – The location, physical limits and scope of the widening or shoulder addition (typical section, construction and right-of-way limits) must be provided.
- Adding or lengthening turn lanes and intersection improvements – The location, physical limits (typical section, construction and right-of-way limits) and scope of the addition or lengthening of the improvement must be provided.
- Safety or traffic operational improvements (lighting, attenuators, barriers, guardrails, skid resistant surfaces, realignment of hazardous curves, glare screens) – The specific location, physical limits (typical section, construction and right-of-way limits) and scope of the improvement must be provided.
- Bridge rehabilitation, reconstruction, or replacement or grade separation to replace at-grade railroad crossings – The location, physical limits (alignment, plan and profile,



typical section, construction and right-of-way limits) and scope of the improvement must be provided.

- Replacement or rehabilitation of culverts, inlets and drainage pipes – The specific location, physical limits (construction and right-of-way limits), and scope of the improvement must be provided.
- Flattening slopes – The location, physical limits (construction and right-of-way limits) and scope of the improvement must be provided.
- Clear zone safety improvements (obstacle removal or relocation) – The specific location, physical limits, and scope of the improvements must be provided.
- Motorist aid or highway information systems – The location, physical limits (construction and right-of-way limits) and scope (coverage) of the system must be provided.
- Freeway traffic surveillance and control systems - The specific location, physical limits (construction and right-of-way limits) and scope of the system must be provided.
- Disposal of excess right-of-way or joint use/limited use of right-of-way – The location, physical and legal description of property and scope of the disposal must be provided.
- Kiosks and facilities (enhancements) – The specific location, physical description (site map and drawings) and scope of the enhancement must be provided.
- Improvements to or rehabilitation of historic transportation facilities (enhancements) – The location, physical description (site maps and engineering/architectural drawings) and scope of the improvement must be provided.

Under the letter agreement, the FHWA has authorized the Environmental Section to review information and plans to determine the applicability of the use of programmatic approvals. If the project meets the requirements contained in the Consolidated Letter Agreement, as amended, the project may proceed without having to be submitted to FHWA for approval. The Environmental Engineer Administrator (EEA) certifies by signed approval that due consideration has been given for the project to be classified as a categorical exclusion.

For state-funded projects, or projects which may not otherwise require NEPA approvals, the EEA shall retain the authority to approve these projects types as listed, certifying that due consideration has been given for the project to be classified as an environmental exclusion (named as to not be confused by terminology used in Federal law).

Stage 1 for these projects shall be deemed complete upon the EEA's determination that the project meets the definition of a project which meets the above requirements.

The use of programmatic Categorical Exclusions is predicated on the requirement that certain conditions do not occur on the project; i.e., if these circumstances do occur on a project under consideration, documentation must be provided to address these circumstances. The circumstances under which a programmatic Categorical Exclusion determination may not be granted are as follows:

- Have unusual or controversial issues involved – public or agency involvement notes that the project is unusual or controversial.
- Use of properties protected under Section 4(f) (49 USC 303) or Section 6(f) of the Water Conservation Act – Public Outdoor Recreation Use - Section 4(f) applies to approval of a project requiring the use of publicly owned land of a public park, recreation areas or wildlife and waterfowl refuge, or land of an historic site of national, State, or local significance (as determined by the Federal State, or local officials having jurisdiction over the park, recreation areas refuge, or site) only if (1) there is no prudent and feasible alternative to using that land; and (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuges or historic site resulting from the use. Section 6(f) of the Land and Water Conservation Fund Act prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the Department of the Interior's (DOI) National Park Service.
- Properties on or eligible for the National Register of Historic Places - The National Register of Historic Places is the nation's official list of cultural resources worthy of preservation. Properties listed in the register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.
- Adversely effect wetlands, with substantial takings or other adverse comment on wetland issues from agencies - Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. Activities in waters of the United States that are regulated under this program include fills for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and conversion of wetlands to uplands for farming and forestry.
- Encroachments of a regulatory floodway or effect 100-year base floodplain elevations of a watercourse or lake - The regulatory floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 100-year flood discharge can be conveyed without increasing the base flood elevation more than a

specified amount. FEMA has mandated that projects can cause no rise in the regulatory floodway, and a one-foot cumulative rise for all projects in the base 100-year elevation.

- Across or adjacent to National System of Wild and Scenic Rivers – In 1968, Congress created the National Wild and Scenic Rivers System, declaring that the established national policy of dams and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.
- Known hazardous waste sites or previous land use with potential for hazardous waste within the right-of-way – The Resource Conservation and Recovery Act describes the requirements for hazardous waste generation, identification and disposal. Potentially responsible parties under RCRA must pay for recovery and disposal of hazardous wastes unless “due diligence” studies are performed.
- Acquisition of more than minor amounts of right-of-way or displacements
- Adverse affect on endangered or threatened species and their habitat – The purpose of the Endangered Species Act is to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved and provide a program for the conservation of such endangered species and threatened species.
- Action is not consistent with the State’s Coastal Zone Management Plan – The Louisiana Department of Natural Resources, Coastal Management Division is responsible for the implementation of the Louisiana Coastal Resources Program (LCRP), an effort among Louisiana citizens, as well as state, federal and local advisory and regulatory agencies to preserve, restore, and enhance Louisiana's valuable coastal resources by sound management.

If such projects do not involve significant environmental impacts, then a categorical exclusion determination may be granted if proper documentation is prepared to address these conditions.

For projects requiring NEPA approvals, the Lead Federal Agency shall review and approve the environmental documentation and make a determination that the project is categorically excluded.

For state-funded projects, or projects which may not otherwise require NEPA approvals, the EEA shall make a determination, based on sound judgment of the impacts and conditions involved, that the project should be environmentally excluded (named as to not be confused by terminology used in Federal law).

Stage 1 for these projects shall be deemed complete upon the EEA's determination that the project meets the definition of a project which meets the above requirements.

#### **5.4.2 Environmental Assessments Checklist**

When a project does not meet the definition of a categorical exclusion and does not clearly require the preparation of an Environmental Impact Statement, an Environmental Assessment should be prepared to determine (1) the presence of no significant impacts to the environment, or (2) that significant impacts to the environment will result and an Environmental Impact Statement must be prepared.

Upon determination that the project should be processed utilizing an environmental assessment (by the Lead Federal Agency for NEPA, by the EEA for State-funded or non-NEPA), the EEA shall request dual project managers from the Chief Engineer.

The Co-project managers will meet to review the results of the Stage 0. Based on this review, they will establish the disciplines that will comprise the initial project team. As the Stage 1 process continues, membership on the project team may include additional disciplines or exempt others as necessary to address the planning, environmental, design and construction requirements of the project.

The results of Stage 1 shall identify the following:

- Environmental assessment documentation of the social, economic and natural environmental impacts of the project
- List of permits required to implement the project
- Location and major design features of the project
- Updated cost estimate, including engineering, construction, right-of-way, utilities, and environmental mitigation
- Mitigation and environmental commitments to be implemented in further stages of project development

For projects requiring NEPA approvals, the Lead Federal Agency shall review the environmental documentation and either (1) approve the Environmental Assessment by issuing a Finding of No Significant Impact, or (2) notify the DOTD that an Environmental Impact Statement must be prepared to address significant impacts to the environment.

For state-funded projects, or projects which may not otherwise require NEPA approvals, the EEA shall make a determination, based on sound judgment of the impacts and conditions involved, that the project should either (1) receive an Environmental Finding (named as to not be confused by terminology used in Federal law), or (2) require the preparation of an Environmental Impact Statement and Environmental Record.

Stage 1 for these projects shall be deemed complete upon issuance of the FONSI or EF and the project manager's preparation of a Scope and Budget Memorandum that is approved by the Chief Engineer. Any significant changes to the project scope or budget must be submitted to the Chief Engineer for approval through the Program Manager. Changes to the budget may need to be brought before the Project Delivery Steering Committee, particularly if the Budget Partition is impacted.

### **5.4.3 Environmental Impact Statements Checklist**

An Environmental Impact Statement must be prepared when it is likely that significant impacts to the environment will result from the implementation of the project.

Upon determination that the project should be processed utilizing an EIS (by the Lead Federal Agency for NEPA, by the EEA for State-funded or non-NEPA), the EEA shall request a dual project managers from the Chief Engineer.

The Co-project managers will review the results of Stage 0. Based on this review, they will establish the disciplines that will comprise the initial project team. As the Stage 1 process continues, membership on the project team may include additional disciplines or exempt others as necessary to address the planning, environmental, design and construction requirements of the project.

The results of Stage 1 shall identify the following:

- A final EIS documentation of the social, economic and natural environmental impacts of the project
- Location and major design features of the project
- Updated cost estimate, including engineering, construction, right-of-way, utilities, and environmental mitigation
- Mitigation and environmental commitments to be implemented in further Stages of Project Development
- List of permits required to implement the project

For projects requiring NEPA approvals, the Lead Federal Agency shall review the final environmental impact statement and issue a record of decision.

For state-funded projects, or projects which may not otherwise require NEPA approvals, the EEA shall make a determination, based on sound judgment of the impacts and conditions involved, that the project should receive an environmental record (named as to not be confused by terminology used in Federal law).

Stage 1 for these projects shall be deemed complete upon issuance of the ROD or ER and the Project Manager's preparation of a Scope and Budget Memorandum that is approved by the Chief Engineer. Any significant changes to the project scope or budget must be submitted to the Chief Engineer for approval through the Program Manager. Changes to the budget may need to be brought before the Project Delivery Steering Committee, particularly if the Budget Partition is impacted.

## **5.5 Deliverables**

At the completion of Stage 1, the following deliverables are required to advance the project to Stage 2 (Prior to finalization, the Scope and Budget Memorandum will be coordinated with the Project Finance Committee.)

- Environmental Closure Document
  - Categorical Exclusion/Environmental Exclusion
  - Environmental Assessment/Finding of No Significant Impact/Environmental Finding
  - Final Environmental Impact Statement/Record of Decision/Environmental Record
- Scope and Budget Memorandum (for EA/FONSI/EF and EIS/ROD/ER)
  - Description of the Project and Selected Alternative
    - Location, Preferred Alignment, and Major Design Features
    - Context-Sensitive Issues and Design Exceptions
    - Maps and Exhibits, as necessary
  - Funding for full project implementation
    - Estimates
      - Construction
      - Engineering

- Real Estate Acquisition
  - Utility Relocation
  - Environmental Mitigation/Commitments
  - Traffic Management
- Possible funding categories/mechanisms
- List of Commitments, Agreements and Permits
  - Commitments which need to be incorporated into the Plans, Specifications and Estimate (Stages 3 and 4)
  - Agency Agreements
    - Memoranda of Understanding
    - Memoranda of Agreement
  - Permits
    - Coast Guard (Section 9, General Bridge Act of 1946)
    - Corps of Engineers (Section 404, Section 10)
    - LA DEQ (Water Quality Certification and NPDES)
    - LA DNR (Coastal Use)
    - LA WL&F (LA Scenic Streams)
- Signatures
  - Recommendations
    - Environmental Section
    - Design Division
  - Approval
    - Chief Engineer

### 5.5.1 Performance Indicators

Performance indicators for Stage 1 will be based on the timeliness and quality of the outputs of the process. Timeliness will be measured by the achievement of the following milestones as initially set by the project manager:

- CE/EE – Determination made by Lead Federal Agency or EEA
- EA/FONSI/EF – Issuance of FONSI or EF
- EIS/ROD/ER – Distribution of Final Environmental Impact Statement

Quality will be indicated by a survey of the major participants in the Stage 1 process. (Details of these measures to be developed.)